DEPARTMENT OF THE ARMY ***III CORPS & FH REG 385-12**
HEADQUARTERS, III CORPS AND FORT HOOD
FORT HOOD, TEXAS 76544-5000
15 AUGUST 2000

Safety

III Corps and Fort Hood Aviation Safety Program

History. This regulation supersedes Fort Hood Regulation 385-9 dated 1 April 1996 and Fort Hood Supplement 1 to AR 672-74 dated 1 December 1992.

Summary. This regulation establishes requirements and provides guidance for the III Corps and Fort Hood Aviation Safety Program. Use of masculine voice also implies feminine voice.

Applicability. This regulation applies to all III Corps and Fort Hood subordinate commands and their assigned, attached and tenant aviation units and activities.

Supplementation. Supplementation of this regulation is prohibited except upon approval of III Corps G1. ATTN: Aviation Safety Officer (ASO) AFZF-GA-SAFE-AV.

Changes. Changes to this regulation are not official unless authenticated by the Directorate of Information Management (DOIM).

Suggested Improvements. The proponent of this regulation is the III Corps and Fort Hood Aviation Safety Office. Send comments and suggested improvements to the Commander, III Corps and Fort Hood, ATTN: AFZF-GA-SAFE-AV, Fort Hood, Texas 76544-5009.

FOR THE COMMANDER:

STEVEN P. SHOOK
Colonel, USA
Chief of Staff

MICHAEL D. CASE
LTC, SC
DOIM

DISTRIBUTION:
IAW FH Form 1853: S

*Supersedes III Corps & Fort Hood Reg 385-9 dated 1 April 1996; Fort Hood Supplement 1 to AR 672-74 dated 1 December 1992.

Contents

Overview

1

Purpose The III Corps and Fort Hood Aviation Safety Program establishes the minimum essential elements of a successful aviation safety program.

1a

References Appendix A lists required and related references.

1b

Abbreviations and Terms The glossary defines abbreviations and terms used in this regulation.

1c

Responsibilities

2

Safety Director and Aviation Safety Officer (ASO) The III Corps and Fort Hood Safety Director and Aviation Safety Officer (ASO), through the ACofS G1, informs the III Corps Commanding General of any aviation safety issues.

2a

Commanders Commanders are responsible for the unit safety program and will develop, implement, and enforce an aviation safety program within their organization.

2b

Unit Briefing Officer The Unit Briefing Officer ensures:

- Aircrews thoroughly understand the assigned mission.
- Risk management is done for each mission.
- All possible risk reduction options are considered.

2c

Air Mission Commander (AMC)

The AMC is responsible for safely accomplishing all multi-ship operations.

If the AMC is not a unit commander, he will assume that inherent responsibility and authority for the mission, including decisions to deviate or abort the mission if the situation changes and safety becomes questionable.

2d

Pilot-in-Command (PC)

The PC is responsible for safely accomplishing all single ship operations.

- The PC decides, regarding the aircraft, to deviate or abort the mission if the situation changes and safety becomes questionable.

2e

Each Soldier

Each soldier is responsible for adhering to the safety program, recommending changes, making on-the-spot corrections, and reporting unsafe acts.

2f

COUNCILS

3

Fort Hood Aviation Safety Council

The Fort Hood Aviation Safety Council is established according to AR 385-95 (Army Aviation Safety Program) to promote and monitor the Fort Hood aviation accident prevention program and resolve problems through command action.

The III Corps ASO coordinates quarterly safety councils, requests time on the Deputy Commanding General (DCG) calendar, sends announcements requesting agenda items, and pre-briefs the DCG before the meeting.

- Anyone having a topic for discussion will provide an information paper to the III Corps ASO five days before the pre-brief.
- Identify the problem, facts bearing on the problem, hazards associated with the problem and possible solutions.
- The III Corps ASO will provide the information papers to the DCG before the pre-brief.

(continued on next page)

Fort Hood Aviation Safety Council (continued)

The council is:

- Chairman: Deputy Commanding General.
- Recorder: III Corps Aviation Safety Officer.
- Members:
  - Commander, 4th Bde, 1CD.
  - Commander, 4th Bde, 4ID.
  - Commander, 21st Cav Bde.
  - Commander, 504th MI Bde.
  - Commander, 3rd ASOG.
  - Commander, 36th Med Bn.
  - G3 Aviation Officer.
  - III Corps G1.
  - III Corps Flight Surgeon.
  - Director Aviation Operations.
  - III Corps Safety Director.
  - Aviation Safety Officer, 4th Bde, 1CD.
  - Aviation Safety Officer, 4th Bde, 4ID.
  - Aviation Safety Officer, 21st CAV Bde.
  - Aviation Safety Officer, 15th MI Bn.
  - DARR, FAA, SW Region.
  - III Corps Standards Officer.
  - Aviation Safety Officer, 36th Med Bn.
  - Airfields Safety Technician, III Corps.

Interested individuals may attend the Aviation Safety Council by contacting the III Corps Aviation Safety Officer.

3a

Fort Hood Aviation Life Support Equipment (ALSE) Council

The ALSE Council promotes and monitors the ALSE program and resolve issues at the lowest possible level.

The Council meets quarterly or as determined by the Fort Hood ALSE Technician.

Issues that cannot be resolved within The Council become Fort Hood Aviation Safety Council issues.

(continued on next page)

Fort Hood *Aviation Life Support Equipment (ALSE) Council (continued)*

The III Corps Aviation Safety Office notifies council members of planned meetings at least 45 days in advance and requests agenda items.

Anyone desiring to place a topic on the agenda must submit an information paper, through their chain of command, to the Fort Hood ALSE Technician not later than 20 days before the scheduled meeting.

- Identify the problem, provide facts bearing on the problem and possible solutions.

When the council president approves the agenda, it will be sent to the council members.

A copy of the completed council minutes will be sent to each member.

Council members are:

- III Corps Aviation Safety Officer (President).
- Fort Hood ALSE Technician.
- III Corps Flight Surgeon.
- Aviation Brigade ALSE Coordinators.
- Aviation Battalion and separate unit ALSE Officers.
- Aviation Battalion and separate unit ALSE NCOs

Interested individuals may attend by contacting the Fort Hood ALSE Technician.

3b

Major Subordinate Commands (MSC) Councils

All III Corps aviation MSCs not assigned at Fort Hood, will establish installation aviation safety and aviation life support equipment councils.

3c

Unit Aviation Safety Councils

Each unit will establish an aviation safety council and enlisted safety council according to AR 385-95 and FORSCOM Regulation 385-1 (Forces Command Safety Program).

3d

Aviation Safety Council Minutes

As a minimum, Aviation Safety Council minutes are distributed to each council member with a copy furnished to the next higher headquarters.

III Corps MSC, Aviation Brigades will forward a copy to III Corps Aviation Safety.

3e

AVIATION OPERATIONS

4

Safety Chain of Command

The safety chain of command is the commander, briefing officer, AMC (if required) and PC.

During aviation operations, in the absence of the aviation unit chain-of-command, the AMC or the PC of the aircraft has final decision authority in all safety related matters.

4a

Risk Management

Commanders will implement and enforce the use of the five-step risk management program, according to FM 100-14 (Risk Management) and FORSCOM Regulation 385-1, for planning and executing all operations.

The program conserves combat power by making operations safe and effective.

4b

Safety Stand-Down Days

Separate units will conduct quarterly safety stand-down days.

Stand-down days heighten safety awareness by providing time to:

- Review policies and procedures.
- Conduct safety sensing sessions and aircrew safety training or briefings.

(continued on next page)

Safety Stand-Down Days (continued)

- Give special emphasis to lessons learned from the results of accident investigations, review of resource management surveys, and quality control of aviation maintenance.

Command involvement is essential to the success of the safety stand-down day.

- This day may be used as the monthly safety meeting for that month for all units, providing attendance, make-up rosters, and synopsis are maintained with the minutes of the safety stand-down day.

- All aircraft flights, except emergency medical evacuations, military assistance to safety and traffic (MAST), and transient flights should be cancelled.

- Aviation Brigade Commanders may approve case-by-case exceptions.

- Consolidate a synopsis of separate unit stand-down day activities at the Brigade level and forward to III Corps Aviation Safety Office.

4c

Aircraft Mishap Prevention Bulletin

All Aviation units will maintain Aircraft Mishap Prevention Bulletin Boards to increase the safety awareness of all aviation personnel, publicize lessons learned from recent accidents, and promote safety awareness in all fight operations.

Aircraft Mishap Prevention Bulletin Boards will be according to FORSCOM Regulation 385-1.

4d

Operational Hazard Report (OHR) (DA Form 2696-R)

The goal of the OHR program is early identification and elimination of hazards or unsafe acts that could result in an accident.

- Commanders will ensure that OHRs are managed according to AR 385-95 and that a briefing is conducted annually and for all newly assigned personnel on the necessity for and preparation of an OHR.

- Forward the OHR to the III Corps Aviation Safety Office when recommendations exceed the capabilities of the receiving aviation brigade or separate unit.

4e

(continued on next page)

Foreign Object Damage Prevention (FOD) Program

The FOD prevention program:

- Enhances combat readiness by saving materiel, manpower, and money lost due to FOD.
- To educate III Corps soldiers, operators, petroleum oils and lubricant (POL) handlers, and maintenance personnel in the prevention, control measures, and techniques to prevent FOD.

It is the responsibility of personnel involved in flight operations to prevent FOD.

- Personnel will police aircraft maintenance and parking areas for FOD constantly.

Fort Hood airfield managers, under the surveillance of the Director of Aviation Operations (DAO), are responsible for Robert Gray and Hood Army airfields, police and maintenance.

- The airfield managers ensure that a FOD and serviceability check of the airfields is conducted daily and that the airfields and parking ramps are swept with a magnetic sweeper weekly.

4f

Wire Strike Prevention Program

The Wire Strike Prevention program prevents personnel and materiel losses resulting from wire strikes and to educate members of this command on wire strike prevention.

Fort Hood wire hazard information is according to AR 385-95 and FM 1-300 (Flight Operations Procedure), on the installation master hazards map located in base operations at Robert Gray Army Airfield (RGAAF) and maintained by the airfield NCOIC.

Hazard maps will be updated immediately, and a Notice To Airmen (NOTAM) issued, when a new hazard has been identified.

Review hazard maps for accuracy at least every 30 days.

Separate installations will develop a wire hazard abatement program tailored to that installation according to AR 385-95 and FM 1-300.

(continued on next page)

Wire Strike Prevention Program (continued)

All flight crews will update their individual tactical maps from the installation master hazard map.

All aviators are responsible for immediately reporting previously unidentified wire hazards to base operations, Aviation Safety, or the Air Traffic and Airspace (AT&A) officer at each installation.

III Corps Aviation Safety will investigate all new wire hazards on Fort Hood to determine if the hazard should be marked with a high visibility wire marking system.

Commanders will ensure:

- A wire strike avoidance class is conducted semi-annually.
- That all newly assigned aviators are briefed on wire hazard avoidance.
- That a reconnaissance of areas unfamiliar to them is conducted before unit aircraft perform low level flight in the area.

4g

Aircraft Accident Notification, Investigation and Reporting Procedures

5

Fort Hood Aviation Pre-Accident and Crash Rescue Plan

Appendix B explains the Fort Hood Aviation Pre-Accident and Crash Rescue Plan.

5a

Aircraft Accidents Involving Advanced Composite Materials

Appendix D defines procedures for units involved in or are part of the recovery for aircraft accidents involving advanced composite.

5b

(continued on next page)

Notification Initial unit actions are according to AR 385-40, and FORSCOM Regulation 385-1, paragraph 4-1 and paragraph 4-2.

5c

Centralized Aviation Accident Investigations Centralized aviation accident investigation policy and procedures will be developed for III Corps units not assigned at Fort Hood.

The III Corps Commanding General is the reviewing authority for all III Corps Class A and B aviation accidents and the approving authority for all Class C accidents.

- The III Corps Aviation Safety Office coordinates Fort Hood, Class A, B, and C aviation accident investigations.
- The owning unit defined by AR 385-40 provides an aviation safety officer as a technical assistant to the accident investigation board, and administrative support as required by the board president.
- The Fort Hood Aviation Safety Office provides office materials, technical support, and office space for Fort Hood accident investigation boards.

The III Corps Commanding General is the board appointing authority for Fort Hood, Class A, B, and C aviation accident investigations.

A duty roster maintained by the III Corps Aviation Safety Office determines Fort Hood accident investigation board members.

- Contact the III Corps Aviation Safety Officer to view the accident investigation duty roster .

When contacted by III Corps or the Installation Safety Office, the aviation MSC will:

- Immediately identify qualified individuals, provide their name, rank, social security number, unit, and duty position to the Installation Safety Office for publication of accident investigation board orders.
- Ensure that board members do not have other duties during the accident investigation.

(continued on next page)

Centralized Aviation Accident Investigations (continued)

III Corps Aviation Safety will make every effort to expedite returning board members to their organizations.

5d

Accident Investigation Responsibilities

When identified the accident investigation board members will:

- Immediately contact the Installation Safety Office.
- Report to the accident investigation board president and complete their portion of the accident investigation report.

When appointed, the accident investigation board will:

- Investigate the accident and safeguard all information from public release according to AR 385-40 and DA PAM 385-40.
- Provide a finalized written report to the Installation Safety Office
    - Within 45 days for Class A or B accidents.
    - Within 30 days for Class C accidents.
- Be prepared to outbrief the MSC and III Corps chains of command.

5e

Abbreviated Aviation Reports (RCS CSOCS-306)

Unit safety officers will prepare and submit an Abbreviated Aviation Accident Report (AAAR), DA Form 2397-AB-R, for Class D, E, and F incidents according to AR 385-40 and DA Pamphlet 385-40.

The brigade level ASO is responsible for accurate, clear, concise, and properly prepared reports sent directly to the U.S. Army Safety Center.

- Aviation Brigades consolidate Abbreviated Aircraft Accident Reports (AAARs) for Class D, E, and F accidents.
- Aviation Brigades submit a quarterly summary of all AAARs to their Installation Safety Office for trend analysis.

(continued on next page)

Abbreviated Aviation Reports (RCS CSOCS-306)

Separate installations will submit quarterly trend analysis summaries to the III Corps Aviation Safety Office.

Submit a copy of all Class C and D AARs to the III Corps Aviation Safety Office as soon they are completed within 30 days.

- The III Corps Aviation Safety Office will ensure accident investigation, reporting, and analyses are accomplished according to AR 385-40 and DA Pamphlet 385-40.

5f

AVIATION ACCIDENT PREVENTION SURVEYS

6

Aviation Resource Management Surveys

Aviation accident prevention surveys are:

- A means for early detection of unsafe conditions.
- A record of a formal, semi-annual survey.
- An effective means of evaluating the condition of a unit's aviation safety program.

Aviation Resource Management Surveys (ARMS) are according to FORSCOM Regulation 385-1 and FORSCOM Pamphlet 95-3 (A Commanders' Guide).

FORSCOM may inspect additional areas if required.

Aviation units must complete aviation accident prevention surveys according to FORSCOM Regulation 385-1.

- Retain results of the survey and corrective actions taken for two years.

Safety and ALSE ARM surveys will result in a satisfactory or unsatisfactory rating and will be in writing.

- The unit will receive the findings and a summary through the chain of command.

6a

Safety and ALSE Surveys

The III Corps Standardization Office, III Corps Aviation Safety Office and the III Corps ALSE technician will conduct separate unit Staff Assistance Visits (SAV) on request.

- The safety and ALSE SAV will not result in a satisfactory or unsatisfactory rating.
- The SAV will identify deficiencies and provide advice, training, and assistance in correcting deficiencies.
- Survey findings are written and given directly to the unit commander.

SAVs are not mandatory, however they do present an opportunity for the commander to get an "outsider's" evaluation of the unit and receive feedback.

Units may request safety or ALSE assistance at anytime by contacting the III Corps Safety Office.

6b

Fort Hood Airfields, Helipads, and Landing Area Surveys

The Fort Hood Director of Aviation Operations (DAO) with the III Corps Safety Office will conduct the semi-annual aircraft accident prevention surveys of Fort Hood airfields.

- Staff results of the airfield semi-annual surveys through the DAO to separate commands for corrective action and follow-up.
- The III Corps Aviation Safety Office will maintain files of the reports and corrective actions for two years.
- Units will inspect landing sites and Helipads according to Fort Hood Regulation 95-1 (III Corps and Fort Hood Local Flying Rules).

III Corps Aviation Safety will conduct quarterly inspections of all published landing sites and helipads at Fort Hood.

6c

Aviation Safety Awards

7

Awards Program Goals

The Accident Prevention Awards Program recognizes units and individuals that contribute significantly to accident prevention and Army safety.

Commanders at all levels will ensure that their Accident Prevention Awards Program is managed according to AR 672-74 and FORSCOM Regulation 385-1.

III Corps aviation MSCs not assigned at Fort Hood, will establish installation aviation safety awards programs according to AR 672-74 and FORSCOM Regulation 385-1.

7a

Army Level Awards

AR 672-74 establishes eligibility requirements for Army level aviation safety awards.

- Fort Hood units will submit requests for these awards through their chain of command to arrive at III Corps Safety Office not later than 90 days from the ending date of eligibility.

- III Corps Safety Office will verify Fort Hood units award eligibility, process the awards request or endorse the request and forward them to FORSCOM.

7b

FORSCOM Commander's Aircraft Accident

Eligibility requirements are in FORSCOM Regulation 385-1.

Nomination packets for each installation are due to FORSCOM not later than 31 October.

The Fort Hood Aviation Safety Office will publish a reminder each year with procedures and a suspense date for submitting Fort Hood's nominations.

Each aviation brigade may submit one nominee for each category for consideration as the installation nomination.

Nomination packets that arrive after the suspense date are not accepted.

(continued on next page)

FORSCOM Commander's Aircraft Accident (continued)

III Corps Aviation Safety Office will review all Fort Hood nominations for the FORSCOM Commander's Trophy and submit two nominations for each category to FORSCOM, according to FORSCOM Regulation 385-1.

- If there are more than two nominations for each category at Fort Hood, an awards committee consisting of the Fort Hood Aviation Safety Officer, Aviation Safety Technicians, and Fort Hood ALSE Technician will select the Fort Hood nominee.

7c

Fort Hood Certificate of Merit for Safety

The Commander, III Corps and Fort Hood established the Fort Hood Certificate of Merit for Safety for any individual making a significant contribution to the Fort Hood aviation accident prevention program.

Examples of significant contributions are:

- Develop or implement outstanding safety policies, programs, or procedures that reduces the chance of accidents.

- Specific act or deed which significantly contributes to aviation safety and reduces the chance of accidents.

The unit commander will prepare a nomination memorandum listing the significant contributions and forward it through command channels to the III Corps Safety Office.

The III Corps Safety Office will review all nominations, recommend qualified individuals for the award, prepare certificates, and forward the certificates to the Commanding General for approval.

7d

Static Displays, Unimproved Landings Sites, and Air Events

8

Landing at Other than Improved Sites

Landing aircraft at other than approved helipads for static displays or any other non-tactical purpose, on or off the military installation, requires a ground safety survey and landing zone risk assessment.

The assessment determines that the use of the display area is operationally suitable and meets safety requirements.

(continued on next page)

Landing at Other than Improved Sites

The separate unit brigade ASO is responsible for ensuring that the survey is conducted according to AR 360-61 (Community Relations) and FH Regulation 95-1.

- The participating aviation unit will record the survey according to Appendix C and provide a copy of the survey to the Installation Safety Office.
- Submit the survey:
  - Not later than the day of the event for landings and static displays on the installation.
  - Not later than 10 days prior for landings and static displays in the public domain.
- The Installation Safety Office will forward the notification to FORSCOM according to AR 360-61.

8a

Mission Risk Assessment

If time does not permit a ground safety survey, the mission risk management sheet will be annotated as a high risk mission and signed by the appropriate risk level approver.

8b

Aerial Events

As a minimum, Aviation units tasked or electing to participate in aerial events must comply with the minimum standards outlined in FAA Order 8700.1, General Aviation Operations Inspectors Handbook, FAA Advisory Circular (AC) 91-45C Waivers: Aviation Events, and Army Regulation 360-61, Community Relations.

8c

Appendix A
References

Section I. Required References

AR 95-30
Participation in a Military or Civil Aircraft Accident Safety Investigation

AR 360-61
Community Relations

AR 385-40
Accident Reporting and Records

AR 385-95
Army Aviation Accident Prevention

AR 600-8-1
Army Casualty and Memorial Affairs and Line of Duty Investigations

AR 672-74
Army Accident Prevention Awards Program

DA Pamphlet 385-40
Army Accident Investigation and Reporting

FM 1-300
Flight Operations Procedures

FM 100-14
Risk Management

TM 5-803-4
Planning of Army Aviation Facilities

FAA Order 8700.1

FAA Advisory Circular 91-45c
Waivers: Aviation Events (2-1-90) (AFS-20)

FORSCOM Regulation 385-1
Forces Command Safety Program

Fort Hood Regulation 95-1
III Corps & Fort Hood Local Flying Rules

Section II. Related References

This section not used

Section III. Referenced Forms.

DA Form 2696-R
Operational Hazard Report

DA Form 7305-R
Telephone Notification of Aviation Accident or Incident

Appendix B
Fort Hood Aviation Pre-Accident and Crash Rescue Plan

General

B-1

Purpose This appendix prescribes procedures and establishes responsibilities for a quick, systematic rescue effort, at the installation level, when an aircraft emergency or accident occurs on or near the Fort Hood military reservation.

This appendix does not describe unit level procedures nor does it preclude the regulatory requirement for a unit level pre accident plan or post accident notification process.

B-1-1

Evaluation The III Corps Aviation Safety Office periodically evaluates this plan during actual or simulated emergencies.

During simulated emergency evaluations only primary stations will respond.

B-1-2

Who To Call Any person observing or receiving a report of an aircraft emergency or accident will notify:

- RGAAF Base Operations at (254) 288-9200/9209.
- III Corps Command Operations Center toll free at 1-800-531-4654 or collect; or long distance at (254) 287-2506/2520.
- Dial 911.
- Any civilian or military air traffic control facility.

These agencies will immediately contact the RGAAF control tower, or base operations to activate the primary crash alarm.

B-1-3

What *to Report*

Any person observing or receiving a report of an aircraft emergency or accident will report:

- Location.
- Aircraft type and identification, if known.
- Description of damage if fire is involved, and severity of injuries.
- Accessibility to aircraft's location by ground vehicle.
- Name, rank, organization, location, and telephone number, or aircraft call sign of the individual reporting the accident.
- Other known agencies notified or proceeding to the site.

B-1-4

Aircraft *Wreckage Security*

Wreckage may contain hazardous materials or ammunition on board that could present a hazard to personnel.

- Personnel not engaged in crash rescue operations will remain clear of the crash area.
- Anyone desiring entry into the crash area must receive a clearance from the accident investigation board or the III Corps Aviation Safety Office.
- Do not move or disturb wreckage except to facilitate the removal of injured personnel or wreckage to alleviate another emergency.

The aircraft accident investigation board president is the releasing authority.

B-1-5

Release *of Information*

No one will release any information or notify the next of kin without prior coordination with the III Corps Adjutant General and the Public Affairs Office.

B-1-6

Primary Crash Alarm System.

B-2

General. Units listed in this plan will ensure that personnel are familiar with their responsibilities and properly trained on all aspects of crash rescue operations including the health hazards associated with a crash site and the proper PPE required to enter the site.

- Post this plan and any necessary local area maps near the designated station telephone.
- The primary crash alarm system consists of stations or units involved in life saving and minimizing injury or property damage.
- The appropriate airfield control tower will activate the primary crash alarm system when a pilot declares an emergency, or an aircraft accident is observed or reported, giving full details of the emergency or accident and assistance needed.
- If one of the agencies cannot be reached by closed circuit, the control tower will call the agency by telephone.
- RGAAF and HAAF airfield control towers will test the system daily.

B-2-1

Responsi-bilities RGAAF Base Operations will:

- Notify the appropriate control tower when a report of an aircraft emergency or accident is received.
- Be the point of contact for the collection and dissemination of data.
- Contact III Corps Operations Center and activate the Secondary Crash Alarm System

Aircraft control tower will:

- Initiate the primary crash alarm system for any aircraft emergency or accident and relay information to primary stations.
- Alert traffic to the emergency and grant traffic priority to rescue aircraft/vehicles.

(continued on next page)

Responsi-bilities (continued)

- Close the runway or airfield until the emergency terminates, aircraft is removed, and foreign object damage check is complete.
- Notify Army radar approach control of the situation and airfield status.

Aircraft fire and crash rescue will:

- Respond immediately to the alarm for accidents within their response area as directed by the installation fire chief.
- Assume command of the incident site until terminated or released to the unit or Aviation Safety Officer.
- Advise airfield flight operations when dangerous or hazardous cargo warrants the presence of specialists (for example, ordnance officer, chemical officer, radiation protection officer).
- Notify ATC when the emergency has terminated.

Emergency Medical Service will:

- Respond immediately to the alarm if the accident is within the local area, or notify the appropriate control tower if an ambulance is unable to respond to the emergency.
- Request assistance from the staff physician in the emergency room to dispatch additional medical personnel/equipment as needed.
- Transport personnel to the appropriate medical facility for treatment or samples.
- On order, remove deceased personnel and transport to Darnall Army Community Hospital.

Lifesaver will:

- Respond immediately to the alarm for accidents in the local flying area, or notify the appropriate control tower if an aircraft is unable to respond to the emergency.

(continued on next page)

Responsibilities (continued)

- Radio preliminary report of crash site and map coordinates to the airfield control tower or flight following to aid ground rescue operations.
- Transport injured personnel to the appropriate medical facility.
- On order, remove deceased personnel and transport to Darnall Army Community Hospital.

B-2-2

Secondary Crash Alarm System

B-3

General

The secondary crash alarm system is composed of units that require notification and may be involved in performing support missions during and after the aircraft emergency or accident.

B-3-1

Responsibilities

The Corps Operations Center will sequentially notify:

- III Corps Aviation Safety Officer.
- Provost Marshal.
- III Corps Public Affairs Office.
- III Corps Command Group.
- III Corps Adjutant General Casualty Branch.
- The owning unit Commander.
- The III Corps Air Force Air Liaison Office in the event that the mishap involves a U.S. Air Force aircraft.

The owning unit Commander or Aviation Safety Officer will:

- Provide the III Corps Aviation Safety Officer with information from the Worksheet for Telephonic Notification of Aviation Accident/Incident (DA Form 7305-R) immediately (all information is desired, but will not delay notification).

(continued on next page)

Responsi-bilities (continued)

- Assume command of the accident site after the fire chief releases it, and provide guards to secure the site and preserve evidence.
- Contact Installation Industrial Hygiene for a site survey.
- Establish and control a "crash pass" system (units will also honor the III Corps crash passes).
- Secure all aircraft records and crewmember flight records and equipment.
- Recover the aircraft after its release by the accident investigation board.
- Be prepared to brief the Installation Commander, within 48 hours, on all Class A accidents.
- Provide resources and assistance to the accident board as necessary.

The III Corps Aviation Safety Officer will:

- Notify the United States Army Safety Center and FORSCOM according to AR 385-40 and FORSCOM Regulation 385-1.
- Proceed to the accident scene with a photographer, get information necessary to notify secondary crash alarm units and assist and advise the site commander.
- Notify, or request Corps Operations Center notify selected secondary crash alarm units.
- Establish the aircraft accident investigation board according to AR 385-40.
- If required, notify the FAA according to AR 95-30 (Participation In A Military or Civil Aircraft Accident Safety Investigation).

(continued on next page)

Responsi-bilities (continued)

The Provost Marshal will:

- Provide crowd control assistance upon request.
- Dispatch a radio-equipped vehicle to any aircraft accident site that is off the airfield with adequate personnel to provide security until unit guards arrive.
- Coordinate with civil law enforcement agencies to obtain assistance for guarding off-post aircraft accident sites.

The III Corps Flight Surgeon is the point of contact for medical information regarding injured or deceased personnel, and provide information to the III Corps Aviation Safety Office and the aircraft accident board.

The Airfield Safety Officer will respond to emergencies or accidents to provide technical assistance, and serve on accident investigation boards, as required.

Hood Radio will:

- Notify Range Control to cease-fire if the accident is near the impact area or firing operations.
- Advise aircraft to maintain one kilometer from and 3,000 feet mean sea level above the accident site, except for accident site support aircraft.

The Public Affairs Office will proceed to the accident site to coordinate with and, when authorized, escort news media representatives to the aircraft accident site.

The Adjutant General Casualty Services Branch will:

- Initiate notification of next-of-kin and other related actions in accordance with AR 600-8-1 (Army Casualty Operation, Assistance, Insurance).
- Provide a copy of reports to the accident investigation board.

(continued on next page)

Responsi-bilities (continued)

The Photographic Laboratory will:

- Provide a photographer to proceed to the aircraft accident site.
- Provide photo CD ROM and photo prints to the accident investigation board president within one duty day of the accident.

The Directorate of Public Works will coordinate engineer support, which may include construction of access roads to the accident site, clearing, earth moving, digging, and environmental evaluations.

The Air Force Air Liaison Office will notify the appropriate individuals in the event that the mishap involves a U.S. Air Force aircraft, and be the liaison throughout the accident investigation.

Air Traffic Control will:

- Secure the control tower, flight following, and Army radar approach control tapes.
- Provide a transcription to the accident investigation board president (if requested).

The Staff Judge Advocate Claims Office will:

- Dispatch a claims officer to the aircraft accident scene to obtain information on damage to civilian property.
- Provide the aircraft accident investigation board with property damage cost for completing aircraft accident report.

The 3d Weather Squadron will:

- Take a local observation for HAAF and RGAAF and radar observation at RGAAF.
- Provide a written summary of weather conditions for the time spanning one-hour prior until one hour after the accident, to the III Corps Aviation Safety Office.

(continued on next page)

Responsi-bilities (continued)

- If weather is a suspected or known factor, provide a qualified weather forecaster as a member of the aircraft accident investigation board.

The Logistics Assistance Office will provide technical assistance to the aircraft accident investigation board, as required.

The III Corps Engineers will:

- Provide supervision for topographic products and survey support.
- Get maps and charts for use in navigation and crash site location.
- Direct tasking of engineer units that possess survey teams and Global Positioning System receivers, and nuclear densometers, conventional survey equipment, and heavy cranes or required recovery equipment.

The ACofS, G5 will coordinate with civilian landowners for access to off-post accident sites for the purpose of investigating the accident and recovering debris.

The Fort Hood Industrial Hygiene section will:

- Respond to accidents that involve aircraft containing advanced composite materials or hazardous waste clean-up to determine if individual protective equipment is required.
- Recommend suitable protection equipment for the operation.
- Conduct sampling operations as dictated by the aircraft recovery operations.

The Installation Radiation Protection Officer will:

- Survey the accident site for radioactive aircraft components and parts.
- Provide or arrange for clean up of all radioactive waste at the accident site.

Appendix C
III Corps and Fort Hood
Helicopter Landing Site Ground Safety Survey

Purpose

Establish standard criteria for conducting ground safety surveys for landing of aircraft at other than approved helipads for static displays or other non-tactical purpose, on or off the Fort Hood installation.

C-1

Procedures

Conduct a ground safety survey of the landing area using the, Limited-Use helipad, obstacle free clear zone criteria as defined in TM 5-803-7 (Planning of Army Aviation Facilities).

Diagram the area depicting all obstacles, hazards to flight, touch down point, approach and departure headings and parking areas.

- Any obstacle inside the obstacle free clear zone is a hazard to flight.
- The touch down point and the parking areas should be located at least 75 feet from any fixed or movable object.
- The approach glide slope is established on an 8-to-1 slope ratio from the touch down point outward.
- Obstacles may exist on the approach axis outside of the obstacle free clear zone:
  - Not to exceed 50 feet in height at the outer limit of the clear zone.
  - Should not penetrate the 8-to-1 glide slope of the approach axis.
- Complete the survey and conduct risk management procedures to reduce identified risks to the lowest possible level.
- After these procedures are complete and obstacles still remain in the obstacle-free clear zone, the appropriate level of command must assess and approve the mission.
- Submit a landing area survey including dates, times, location, quantity and type aircraft, to the Installation Aviation Safety Office.

C-2

Figure C-1. Sample Helipad Ground Safety Survey

1. Location: _____ Date Surveyed: _____

ASO Conducting Survey: _____ Mission Date/Time: _____

Type/Number A/C: _____

2. LANDING AREA.

a. Type: [ ] Field [ ] Road [ ] Other _____

b. Surface: [ ] Grass [ ] Dirt [ ] Pavement [ ] Other _____

c. Lighted: [ ] Yes; How _____ [ ] No

d. Windsock: [ ] Yes [ ] No Lighted: [ ] Yes [ ] No

e. Touch Down Point Marked With: _____

3. APPROACH/DEPARTURE INFORMATION.

a. Approach Heading: _____ Departure Heading:

b. Obstacles: Height/Location/Markings?

[ ] Wires _____

[ ] Trees _____

[ ] Poles _____

[ ] Towers _____

[ ] Fence _____

[ ] Other _____

4. LANDING AREA DIAGRAM. Attach a diagram IAW instructions.

5. SAFETY REVIEW.

a. Day Operations: [ ] Approved [ ] Disapproved

b. Night/Unaided: [ ] Approved [ ] Disapproved

c. NVG Operations: [ ] Approved [ ] Disapproved

d. AdditionalRemarks:_____

_____

e. Risk: [ ] Low [ ] Medium [ ] High [ ] Extreme High

6. ENDORSEMENTS:
a. Aviation Safety Officer:
b. Risk Management Approver:
c. Installation Safety Approver:

Appendix D
III Corps and Fort Hood
Aircraft Accidents Involving Advanced Composite Materials

Advanced Composite Materials (ACM)

D-1

General

This appendix provides policy and guidance for the response to aircraft accidents involving advanced composite materials

The use of advanced composite materials (ACM) in military aircraft, vehicles and equipment is increasing.

All army rotary wing aircraft now contain ACM.

The location and amount of ACM vary by aircraft type, but they are most commonly used in rotor blades, certain fuel tanks, mast mounted sites, and various cowlings, fairing, panels, and frames.

ACM is in protective equipment such as helmets and fragmentation protective vests.

D-1-1

Hazards

While ACMs are stronger and lighter than the metal components they replace, case histories and research indicate that they can cause health problems to unprotected personnel when burned or fragmented during an aircraft accident.

- ACM consist of fibers such as graphite, Kevlar, fiberglass, and boron held in a resin base.
- The resin most commonly used in Army aircraft is epoxy.
- The primary composite hazard is sharp splinters from broken and crushed composite material that may become airborne and inhaled into the deep lung.
- This hazard will increase as components are disturbed or broken.

(continued on next page)

Hazards (continued)

WARNING: If ACM are burning hazardous gases, smoke, fumes and fibers may be present. Unless a self-contained breathing apparatus (SCBA) is being used, personnel will stay at least 25 feet upwind and out of any smoke.

- Burning ACM initially produce hazardous gasses as the resin burns.
- The fibers are then release into the atmosphere and may come in contact with the skin, eyes, and respiratory system.
- Wind and other disturbances increase the severity of the problem with increased amounts of airborne fibers.

The respirable nature of a fiber relates directly to its size.

- Fibers that splinter during combustion, explosion, or post-crash disturbance are more likely to become airborne and be respirable.
- Unprotected rescue, fire fighting, investigation, and aircraft recovery personnel are at risk for health damage due to released composite fibers.
- Symptoms may include headaches, burning eyes, and respiratory or skin irritation.

D-1-2

Responsi-*bilities (continued)*

The Installation Safety Office:

- Notifies and coordinates with appropriate agencies.
- Provides information on the extent of the composite hazard when reporting the accident or as soon as the information becomes available.
- Monitors accident sites for compliance.

(continued on next page)

Responsibilities (continued)

MEDDAC Industrial Hygiene:

- Monitors for individual exposures to composite fibers and other hazardous materials and determines if protective equipment is needed.
    - Recommends suitable personal protective equipment (PPE).
    - Provides a copy of the sampling result report to the Installation Safety Office and the unit conducting the recovery operation.

Installation Respiratory Specialist will provide guidance and training on the use of respiratory equipment.

Installation Fire Stations sprays acrylic fixant on burned ACMs at accidents within their response area and at other accidents as directed by the Installation Fire Chief.

DPW, or the Installation Environmental Management Office provides assistance and guidance on the cleaning up and disposal of ACMs.

D-1-3

Unit Pre-Accident Planning.

D-2

General

Commanders with aircraft containing ACMs, medical evacuation personnel, and units with an aircraft recovery mission must include the provisions of this regulation in the Unit Pre-accident plan.

Commanders must identify personnel that may be required to enter an aircraft accident site before or with the investigation and recovery teams.

- These personnel should include but are <u>not</u> limited to:
    - The unit safety officer.
    - A technical inspector.
    - An aircraft mechanic.
    - The unit environmental officer.
    - The unit hazardous material officer.
    - An Industrial Hygienist.
    - Several soldiers.

(continued on next page)

General (continued)

A unit ACM response team must be formed at the level of command (company, battalion, brigade) most appropriate for available resources and unit mission.

- All personnel who will be who are assigned these duties must be trained and equipped with the proper PPE prior to an aircraft mishap as indicated in paragraph D-2-2.

- Waiting until after an accident has occurred to identify, medically screen, evaluate, train and issue equipment to personnel will significantly slow investigation and recovery efforts.

Commanders will ensure that:

- Annual briefings on the hazards of composite materials, ways to protect personnel from exposure, when PPE is necessary and its proper use are conducted.

- Recovery personnel are medically cleared and properly fit -tested and trained annually to wear respiratory protection, and training on the actions to be taken in the event of an accident for all unit personnel is conducted.

As a minimum all units with aircraft containing ACM or with an aircraft recovery mission will maintain PPE for an initial recovery effort for four people for two days to include:

- Protective coveralls with hood and booties, 16 pair.

- Respirator with filters, 4.

- Goggles (if half-face respirator is used), safety impact, 4 pair

- Puncture resistant gloves, with liners, 4 pair.

- HEPA vacuum (if available) with filters, 1.

The Industrial Hygiene and Safety Office will provide guidance on acquiring the correct PPE.

Additional PPE may be required based on the findings at the accident site.

Personal Protective Equipment (PPE)

Personnel working with or within 25 feet of any burned composite materials will wear PPE outlined in this paragraph.

Likewise, if personnel are *breaking* or *cutting burned* or *unburned* composite parts, the same PPE requirements apply.

- Respiratory Protection: Wear NIOSH approved full-face respirators, since the concentration of contaminants is unknown.
    - Each respirator must be equipped with organic vapor cartridges and P-100 filters.
    - All personnel must have been medically cleared, fit tested and trained to wear the respirator.
        - The use of full-face respirators is recommended because they will provide a greater protection factor and eliminate the need for safety goggles.
- Eye Protection: Impact Safety goggles (with either no or small vent holes to minimize particulate/fiber entry) shall be worn when a half-face respirator is used.
    - Safety glasses with side shields are <u>not</u> recommended within the 25 ft boundary area of the mishap site.
- Skin Protection: If fractured composites must be moved, leather gloves will be required.
    - Coveralls - Tyvek, coated with 1.25 mil polyethylene with attached hoods are required.
        - The coveralls should have a zipper front, elastic sleeves and ankles, and drawstring hood.
        - External booties will reduce the possibility of boot contamination and dermal contact potential.
        - Any openings or attachment points, especially at the ankles and wrists, should be sealed with duct-tape to keep out particulate.

(continued on next page)

Personal Protective Equipment

Table D-2-2 lists NSNs for Tyvek disposable coveralls are:

Table D-2-2. NSN Tyvek Coveralls

SIZE	NSN
Small	8415-10-092-7529
Medium	8415-10-092-7530
Large	8415-10-092-7531
Xlarge	8415-10-092-7532
XXlarge	8415-10-092-7533

- Gloves – Wear pPuncture resistant leather gloves as a minimum.
    - Optimally, Nitrile gloves shall be worn as an insert to the leather glove to protect against blood-borne pathogens, solvent residue, and fuel spills.
    - Industrial Hygiene will determine any additional specific requirements .
- Boots – Wear steel-toed shoes or boots.
- Additional protection - Wear SCBA, splash suits (as determined by an Industrial Hygiene Specialist) when jet fuel or hydraulic fluid or other hazards exist.
    - Similarly, when burned composite materials have been coated or set with fixant and the surrounding area satisfactorily sanitized or the parts moved to a new location, only peripheral area protection is required unless otherwise stated.

Waste Disposal

General Disposal Guidance

Dispose of waste correctly.

Installation Environmental Management Offices (EMO) can provide specific waste disposal guidance.

(continued on next page)

General Disposal Guidance (continued)

If assistance is not available from an Army Installation EMO, the on-site commander will evaluate the situation, and request assistance from the nearest DOD, local, state, or federal environmental agency.

D-3-1

Specific Guidance

Place fully cured composite waste material, contaminated coveralls, used vacuum and respirator filters, etc., in drums, plastic bags, or shrink-wrap.

Plastic bags or wrap should be six to eight mils (.006 - .008") thick.

- If material is less than this thickness, use multiple bags or wrappings to attain this thickness.
- Seal and dispose of as non-hazardous solid waste per local and state guidelines.

Mark all disposal containers with a label that reads: COMPOSITE WASTE. DO NOT INCINERATE. DO NOT SELL FOR SCRAP.

D-3-2

Individual Exposure Monitoring Recovery and Clean-up

Industrial Hygiene must be requested to continue monitoring the accident site for individual exposure limits as burned composite wreckage is removed, stored and disposed of.

D-3-3

Disposition Of Personal Protective Equipment (PPE)

Dispose of all protective clothing except respirators according to EMO recommendations.

Dispose of used Tyvek coveralls and respirator cartridges after each use according to paragraph D-3-2.

Launder separately or dispose of other clothing worn in the accident area that may have been contaminated.

- Never take this clothing home for laundering.

If a contractor launders clothing, tell them of the possible presence of composite fibers so that the clothing can be laundered separately.

(continued on next page)

Disposition of Personal Protective Equipment (continued)

If there are many fibers on the clothing to be washed presoak and rinse the garments first.

After washing, rinse the washing machine thoroughly before the next use. .

D-3-4

Accident Site Preparations

D-4

Personnel Preparations

Provide changing tents positioned upwind of burned composite debris for personnel to change into PPE in an area separate from the actual work area.

Before departing the accident site, workers should:

- Vacuum their coveralls with a HEPA vacuum to remove dust and fibers (or hose down coveralls if HEPA vacuum is not available).
- Remove PPE in an area separate from the actual work area, wash or shower, and change into clean street clothing or uniforms.

At a minimum, hand washing facilities must be available at the site.

- Recovery personnel must wash their hands and face prior to eating, dirk, or smoking.

D-4-1

Fixant and Stripping Materials

In addition to normal requirements, Installation Fire Stations will spray a fixant on burned ACMs at accidents within their response area and at other accidents as directed by the Installation Fire Chief.

Suitable fixants include Polly-Acrylic Acid (PAA), a commercially available acrylic fixant, acrylic floor wax chemically similar to PAA, or an equivalent sticky substance to include a light oil mist (least preferable).

Any substance used as a fixant must be strippable if applied to debris that will undergo microscopic analysis by accident investigators.

PAA and acrylic household floor wax are transparent and strippable when wet or dry.

(continued on next page)

Fixant and Stripping Materials (continued)

If the Installation Fire Stations are not available, use a field expedient method to apply fixant, by mixing a solution of ten parts water and one part acrylic floor wax into a garden style sprayer, or any other similar device.

Personnel spraying fixant must be in suitable protective equipment as recommended by Industrial Hygiene.

D-4-2

Glossary

AAAR
Abbreviated Aircraft Accident Report

ACM
Advanced Composite Materials

ALSE
Aviation Life Support Equipment

AMC
Air Mission Commander

ARMS
Aviation Resource Management Survey

ASO
Aviation Safety Officer

AT&A
Air Traffic and Airspace

CD ROM
Compact Disk Read Only Memory

DA
Department of the Army

DAO
Director of Aviation Operations

DARR
District Area Regional Representative

DCG
Deputy Commanding General

DPW
Department of Public Works

EMO
Environmental Management Office

FAA
Federal Aviation Administration

FH
Fort Hood

FOD
Foreign Object Damage

FORSCOM
Forces Command

GPS
Global Positioning System

HEPA
High Efficiency Particle

IAW
In Accordance With

MAST
Military Assistance to Safety and Traffic

MEDDAC
Medical Activity

MSC
Major Subordinate Command

NIOSH
National Institute for Occupational Safety and Health

NOTAM
Notice To Airman

OHR
Operational Hazard Report

PAA
Polly-Acrylic Acid

PC
Pilot in Command

POL
Petroleum Oil and Lubrication

PPE
Personal Protective Equipment

RGAAF
Robert Gray Army Airfield

SAV
Staff Assistance Visit

SCBA
Self Contained Breathing Apparatus

USASC
United States Army Safety Center

3d ASOG
3d Air Support Operations Group

4th Bde, 1CD
4th Brigade, 1st Cavalry Division

4th Bde, 4ID
4th Brigade, 4th Infantry Division

15th MI Bn
15th Military Intelligence Battalion

21st Cav Bde
21st Cavalry Brigade

36th Med Bn
36th Medical Battalion

504th MI Bde
504th Military Intelligence Brigade